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PROPOSALS FOR REORGANIZATION OF THE NATIONAL RECONNAISSANCE PROGRAM

I. Assumptions.

Set forth below are certain basic assumptions which determine the organization appropriate for the administration and direction of the National Reconnaissance Program (NRP). These assumptions reflect a general consensus of opinion of qualified individuals from the intelligence and scientific communities who have observed or participated in the National Reconnaissance Program since 1956.

A. The national character of this essential intelligence enterprise must be maintained through a joint endeavor on the part of DoD and CIA.

B. The potentialities of U.S. technology must be aggressively and imaginatively exploited to develop systems for the collection of intelligence which are fully responsive to intelligence needs and objectives. In the development of new systems maximum use must be made of the experience, resources, facilities and technical competence of appropriate components of the Defense Department and CIA.

C. Scheduling and targetting of satellite and manned aircraft reconnaissance missions over denied areas should be the responsibility of the DCI and the United States Intelligence Board (USIB).

D. A new organizational framework is required which, particularly in the field of satellite reconnaissance operations and systems development, will: (1) provide a clearly established delineation of the roles and responsibilities of components of the Government engaged in these activities, and (2) ensure effective coordination of these activities under centralized policy guidance and control.

II. Alternatives.

Alternative organizational proposals considered include:

A. Allocation of exclusive responsibility for the development and operation of satellite reconnaissance systems to: (1) an existing component of the Defense Department, or (2) CIA, or (3) some new agency to be created along the lines of NSA.

B. Authorization to CIA and DoD and its components to continue independently the development and operation of satellite reconnaissance systems subject to arrangements for levying intelligence requirements and the exchange of information and provision of mutual support, with decisions concerning systems allocation and utilization to be made ad hoc by the Secretary of Defense and the DCI or the 303 Committee.

C. Establishment of an institutional basis for centralized control and direction of the program based on: (1) an Executive Committee, consisting of the Deputy Secretary of Defense and the DCI, responsible for the formulation of basic policy, budgetary decisions and the broad allocation of program responsibility; (2) a Director of National Reconnaissance responsible to the Executive Committee for coordination of the entire program with staff responsibility for all components engaged in reconnaissance activities other than such elements of the Defense Department or the Armed Services as may be assigned to his direct supervision by the Secretary of Defense; and (3) recognition of the DCI and USIB responsibility for determining requirements for mission coverage and frequency and establishment within CIA of facilities for the formulation and transmission of guidance governing intelligence targets and objectives insofar as these determine the ephemeris of all satellite reconnaissance missions.

III. Discussion of Alternatives.

A decision to assign exclusive control of the operations and development of all satellite reconnaissance systems to the Defense Department would obviously be incompatible with the assumption that it is essential to preserve CIA's technical competence and experience as a contributing factor in the satellite program. Moreover, active participation by CIA in the research, development and production phases of satellite reconnaissance sensors would seem highly desirable for the purpose of ensuring that development or improvement of satellite payloads for reconnaissance purposes is fully and exclusively responsive to intelligence needs. Because of its charter responsibilities, CIA's participation in reconnaissance systems development provides assurance that payload designs will not be diverted or degraded to accommodate non-intelligence gathering purposes.

Allocation of an exclusive franchise to CIA for all phases of satellite reconnaissance would place responsibilities on CIA which exceed its capacities and provoke strong opposition, particularly on the theory that this would create a third agency in space with undesirable consequences. A decision giving CIA exclusive responsibility for payload development would deprive the program of resources under DoD control and eliminate desirable competition.

The proposal to create a new NSA-type organization responsible for all reconnaissance activity offers few advantages. Implementation of such a proposal could involve the establishment within a new, quasi-autonomous agency of all the facilities and authority necessary to carry out all aspects of the entire reconnaissance program, such as launching, tracking, recovery, and other operational, procurement and R&D facilities, including assumption of CIA's present responsibilities for covert relations with foreign governments in connection with U-2 operations and the DCI's authority to expend unvouchered funds under Public Law 110. Or it could involve retention of some of these responsibilities and facilities in CIA and existing components of DoD. This alternative, therefore, either involves creation of a formidable new agency with far reaching jurisdictional implications in the space, intelligence and R&D fields. Or it only serves to complicate rather than resolve the problem of achieving a coordinated program under centralized direction and control.

The alternative under which CIA and DoD would independently continue development and operation of reconnaissance systems under a loose coordinating arrangement simply perpetuates the existing unsatisfactory and chaotic situation.

Some solution along the lines of alternative C (paragraph II) appears imperative. The broad outlines of such an arrangement have been suggested by the DCI from time to time and were discussed by him with the Secretary of Defense and the Deputy Secretary of Defense on 27 February. The details of the proposed institutional arrangements are described and explained in some detail in a memorandum outlining CIA organizational proposals for the organization of the National Reconnaissance Program (annexed as Tab 1). By way of introduction, however, it may be helpful to identify some of the major organizational features of the proposed arrangement and discuss very briefly some of the considerations which the organization suggests.

a. Executive Committee. The proposal to confirm and formalize this committee reflects recognition of an inevitable duality of responsibility as between DoD and CIA for the program as a whole. This device appears to be about the only way to ensure contributions on a fully coordinated basis by subordinate elements of CIA and DoD to a highly complex program, which involves very substantial operational, developmental and procurement responsibilities, without doing violence to the integrity of managerial lines of command. Given the importance and character of the program, it can confidently be expected that officials at the level represented on the Executive Committee will reach agreement on all issues submitted to the committee, provided they are properly staffed and presented. The most serious objection to the arrangement is the demand which it creates on the time of the two officials involved. This burden, however, will be reduced as the committee succeeds in establishing broad guidelines governing the allocation of

research and other responsibilities and to the extent that the DNRO (contemplated in the proposal) succeeds in gaining the confidence of the committee and of participating agencies.

b. DNRO. Considerable concern has been expressed with the need to define the precise authority and responsibilities contemplated for this official. The proposal is that he would function in a manner and with authority substantially commensurate with that of an Assistant Secretary of a large department. He would have full access to all details of all activities and the right inherent in any staff officer to question programs, proposals or decisions; to suggest alternatives and to require review through the appropriate command line or through appeal to the Executive Committee, on whose behalf he functions. To the extent that the Secretary of Defense deems appropriate, he would also assume direct managerial responsibility for components of the Defense Department involved in the program.

c. Intelligence Input. Orbital plans for satellite missions must be designed to assure:

(1) that, to the extent that intelligence targets determine an orbital mission plan, these targets will be identified by USIB, and incorporated into the flight plan through an instrumentality of CIA; and

(2) that the intelligence community will be in a position to be aware of the degree, if any, to which intelligence considerations are subordinated to other non-intelligence considerations in the planning or execution of an orbital flight plan and to protest, if necessary ex post facto, if such subordination appears unreasonable or improper.

Guidance determining the ephemeris of a mission ultimately assumes computerized form. It is here proposed that, insofar as the ephemeris is established by intelligence objectives, computerized guidance for the mission will be formulated by a "Satellite Requirements Program Center" (analogous to the present SOC) under CIA control. The process by which the

ephemeris of a satellite mission is determined is complicated by the necessity to incorporate guidance to accommodate considerations not related to intelligence, such as R&D, weather, "the health of the bird," etc. The intelligence and non-intelligence inputs into the over-all computerized guidance have to be related in a complicated process reflecting a complex interrelationship. By reserving to CIA the authority to develop the computerized guidance relating to the intelligence objectives of a particular mission, it is not intended to pre-empt or denigrate the authority of the Defense Department over launching, inflight or recovery aspects of a mission.

d. R&D. The research, development, testing and production responsibilities reserved to CIA in the proposed arrangement, to ensure utilization of CIA's special competence, are also not intended to impair the authority and responsibility of the Defense Department for assembling, launching, orbital control and recovery of reconnaissance satellites. The agency responsible for exercising the Defense Department's authority in this respect can (it seems reasonable to assume) be so organized as to accommodate CIA representation, in conjunction with their contractors, at the point of assembly of a payload into a launch unit. It can also, during the test stages of a new payload, accommodate the presence of engineering and technical representatives of CIA and their contractors, as consultants to ensure that the flight is responsive to the technical and engineering objectives of the test.

e. Budgeting. The entire process by which CIA obtains its appropriations and by which funds are authorized and allocated to the "black budget" for all purposes, including the funding of national reconnaissance projects, is complicated and probably deserves review. To the extent that the present organizational proposals involve budgetary procedures the intent is to make sure that funds will be allocated in bulk and in amounts roughly commensurate with the estimated costs of programs responsibility for which has been allocated as between agencies. The purpose of this is to encourage rather clear cut allocations of program responsibility (after adequate study and evaluation) and discourage

any propensity on the part of subordinate echelons to nullify or erode decisions awarding program responsibility by withholding funds required for incremental aspects of a program the over-all desirability of which has already been approved at a policy level. Nothing in this proposal is intended to limit the right, or the responsibility, of the DNR to review program accounts, cost estimates, or budget, or to initiate reprogramming exercises or, at any time, to propose review, modifications, or termination of program decisions through the line of command or the Executive Committee.

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PRINCIPAL FEATURES OF CIA ORGANIZATIONAL PROPOSAL

A. ROLE OF THE EXECUTIVE COMMITTEE:

An Executive Committee, consisting of the Deputy Secretary of Defense and the Director of Central Intelligence, will be established to formulate, guide, and regulate the NRP. Specifically the Executive Committee will:

1. Examine the reconnaissance requirements provided by USIB against technical and fiscal capabilities, so as to establish an appropriate level of effort for the NRP. In this role it will rely largely on cost estimates and technical feasibility analyses prepared by the DNR and the component elements of the NR Organization and USIB views expressed with knowledge of cost factors.

2. Approve or modify the consolidated NR program and its budget as forwarded by the DNR.

3. Acting through the DNR, allocate responsibility to CIA and/or DOD for research and preliminary design studies for new systems.

4. Allocate development responsibility for specific reconniassance programs to DOD or CIA, and establish guidelines for mutual support where appropriate. It shall be free to use technical advisory groups as necessary.

5. Assign operational responsibilities to either DOD or CIA for various types of manned overflight missions, subject to the concurrence, as appropriate, of the 303 Committee.

6. Review periodically the essential features of the major program elements of the NRP.

B. ROLE OF THE DIRECTOR OF NATIONAL RECONNAISSANCE:

To insure the coordination of CIA and DOD reconnaissance activities a Director of National Reconnaissance will be appointed by the Secretary of Defense with the concurrence of the Director of Central Intelligence. He will provide a single point of integration for the planning and budgeting of the National Reconnaissance Program and will be responsible to the Executive Committee for the execution of the program. Specifically, he will:

1. Assume such command responsibilities over DOD elements of the NRP as the Secretary of Defense may designate. He will establish suitable lines of coordination with those line components which do not respond directly to him.

2. Be kept fully and completely informed of all reconnaissance activities in CIA and DOD.

3. Schedule the use of the space launching, tracking and recovery facilities.

4. Review budget proposals submitted by appropriate elements of CIA and DOD and prepare and submit a consolidated budget for examination and approval by the Executive Committee.

5. Ensure the flow of funds from the NRP appropriations to CIA and appropriate DOD elements in lump sum transfers each fiscal year. Incremental funding from reserve or reprogramming sources will be used for supplemental programs approved by ExCom.

6. Deal with the operating head of the CIA or his designated alternate on all matters of policy, coordination, or guidance. He will not exercise command control over subordinate elements of CIA or its personnel.

7. Sit with the USIB for the matters affecting the NRP.

8. Appear before the 303 Committee to the extent desired by the DCI or the Deputy Secretary of Defense to secure approval for overhead reconnaissance missions.

C. RESEARCH AND PRELIMINARY DESIGN:

1. Research on reconnaissance technology and preliminary design of new systems will be encouraged and supported in both CIA and DOD. It will be supported by a lump sum allocation from NRP funds to each group at a level to be established by the Executive Committee.

2. A prescribed amount of these resources will be allocated for support of basic research on reconnaissance technology to stimulate and assure the future vigor of this field. The DNR will be kept fully informed of all activities and developments in this connection for the purpose of ensuring appropriate coordination and preventing unwitting duplication as well as encouraging joint exploitation of new techniques.

3. Preliminary design and small technical feasibility demonstrations of new reconnaissance systems will also be funded from this innovation resource. Such work can grow out of requirements originating with USIB, the ExCom or the DNR for improvements in existing capabilities, or can result from spontaneous initiative in the CIA and DOD participating elements. However, it is important that the DNR and ExCom receive each month a comprehensive report on the initiation, status, or conclusion of such efforts. In this way, competitive study efforts will be recognized, approved or discouraged, and synchronized for later decision actions.

4. It is intended that these funds and their products represent the flexible cutting edge of the reconnaissance program. They should not be used to fund actual development or operational activities.

D. SYSTEMS DEVELOPMENT:

1. When a new system concept has been sufficiently well defined and its technical feasibility established to the satisfaction of the ExCom, it would be included in the inventory of the NRP. At this point, it should receive necessary funding from line items in the budget identified with these systems. These funds would then be allocated to CIA and/or DOD, to whom specific developmental responsibility has been assigned by the ExCom.

2. The element of CIA and/or DOD assigned development responsibility for a new system will be responsible for selecting and supervising capable contractors; for establishing such systems engineering support as they deem necessary; for rendering periodic reports on program progress to the DNR and ExCom and generally for the success of the program.

3. Satellite reconnaissance systems are characterized primarily by the payload (cameras, spacecraft, data recovery system) as well as by their boosters. The interface between the launch system and the payload is of critical importance and planning for compatible checkout and launch facilities, boosters, tracking and recovery must proceed with the payload development. The DNR will be responsible for the success of this interface.

4. As a matter of principle, in order to avoid duplication and promote efficiency and economy, development responsibilities will be assigned with a view to utilizing, to the fullest extent possible, established competence and available resources in such areas as space and re-entry vehicles, boosters, and related equipment. No hard and fast rules can govern decisions allocating responsibility for development of systems or components of systems and general principles of efficiency, based on informed common sense, must prevail.

5. A normal phase of satellite development programs is the initial flight testing in orbit and engineering proof of the completed payload system. These flight tests will be conducted by the element of DOD responsible for assembly, launch and inflight control of the vehicle (presumably under the direct supervision of DNR) with due regard to the advice of the representatives of the element in CIA or DOD which has developed the payload. Flight testing must obviously be performed under circumstances which afford an appropriate opportunity for those who have developed the payload to be heard on matters which may affect their engineering or

technical interests. Flights would be expected to include as many intelligence targets as are consistent with the primary development objective so that any film recovered would have intelligence value. When a system had been successfully demonstrated and declared operationally reliable, it would enter the operational phase.

E. ROUTINE OPERATIONAL PHASE:

1. When the satellite payload has been successfully developed, it becomes a part of the operational assets of the NRP. The payloads, together with appropriate boosters, launchers and tracking stations, represent the NRP capability to obtain orbital photography, and accordingly represent part of an orderly program to acquire intelligence in response to USIB requirements, target lists and priorities. The DNR must play the central role in planning this program. It involves far-sighted budgeting for payload production as well as booster procurement and modification. It involves judicious scheduling of operational launches from fixed resources, in addition to development flight tests. It requires a plan with sufficient flexibility to respond to changing world situations and the corresponding intelligence needs. It is a complex managerial task for which a single individual must in the last analysis be responsible.

2. Both the long range requirements for satellite missions and the shifting targets for specific flights come properly from the intelligence community in which all elements of the Government have a voice. The community has named COMOR as the staff to provide these requirements in an orderly way, subject to approval by USIB.

3. The Satellite Requirements Program Center, formerly known as the Satellite Operations Center, is the next step in that sequence of events. Its function is to plan specific mission coverage in light of COMOR target requirements. It does so by first studying the spectrum of orbital choices available. These are supplied by various groups on the West Coast and represent specific launch vehicle propulsion capabilities,

current range safety restrictions, etc. These feasible orbits are then computer analyzed in Washington to optimize target coverage in light of sun angle, predicted weather conditions and target priorities. An orbit is selected and camera programs established for this mission. This is basically an intelligence function.

4. In the case of CORONA coverage, the Satellite Requirements Program Center has played a central role in determining the ephemeris of the mission and transmitting computerized guidance to the launch authority. Until the spring of 1963, the Center was located at CIA Headquarters next to COMOR, where it was used exclusively in CORONA and ARGON flights and was in immediate communication with the West Coast facilities. It was then moved to the Pentagon, with a view to extending its functions to include GAMBIT, although mission guidance to this program is not yet determined by the Center largely because flights in this system continue to be classified as R&D flights. The Center should be used to provide the intelligence input for mission guidance of all satellite operations recognizing that procedures will differ between system due for example to the on-orbit loading capacity of GAMBIT.

5. Although most of the responsibility of the developing team is fulfilled when a satellite payload is declared operational, there are persuasive arguments why those responsible for development should continue to have a certain role in the operational phase. The most compelling argument is that payloads systems are being continually improved -- and should be. The remarkable improvement of CORONA from monoscopic to stereo and then to doubled film capacity via double recovery vehicles is an example. Furthermore, these are extremely delicate instruments and no two payloads from a given system are quite alike. This does not mean that the camera contractor should fire a THOR or ATLAS. Quite to the contrary such operational activities must be under a single, not a divided authority. It does mean that there is no point in the procurement, production or operational sequence

at which one can entirely eliminate the payload team completely. Payloads will be delivered in accordance with agreed schedules for assembly into the launch vehicle. During the assembly of booster and payload, there must be adequate representation for purposes of advice and consultation from the Government agency as well as the contractors responsible for developing the payload. The DNR, dealing with the Defense Department agency responsible for booster, assembly and launching (over which he presumably has managerial authority) and given staff authority on behalf of the Executive Committee should be able to see that this interface works.

6. Once a satellite payload is launched in orbit, it enters a crucial period of real time tracking, monitoring and control. Tracking and telemetry recording from low altitude photography is accomplished by Air Force stations. This data is transmitted to Sunnyvale, California, where the operation is run. Inflight decisions include decisions to recover if a malfunction is suspected and transmissions of camera program changes to the satellite so as to take advantage of changing weather or other opportunities. The presence of an intelligence representative available for consultation to the authority responsible for inflight control of the vehicle will help to ensure that these decisions are taken with appropriate regard for intelligence interests.

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